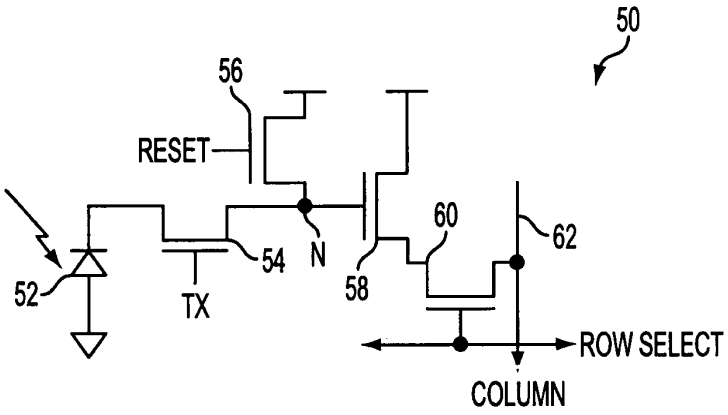
50
56
RESET
52
TX
54
N
58
60
62
ROW SELECT
COLUMN

FIG. 1

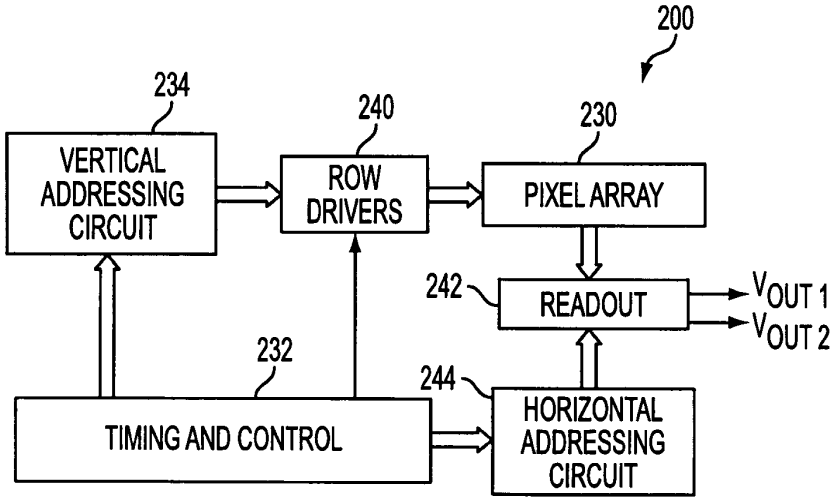
200
234
VERTICAL ADDRESSING CIRCUIT
240
ROW DRIVERS
230
PIXEL ARRAY
242
READOUT
VOUT 1
VOUT 2
232
244
TIMING AND CONTROL
HORIZONTAL ADDRESSING CIRCUIT

FIG. 2

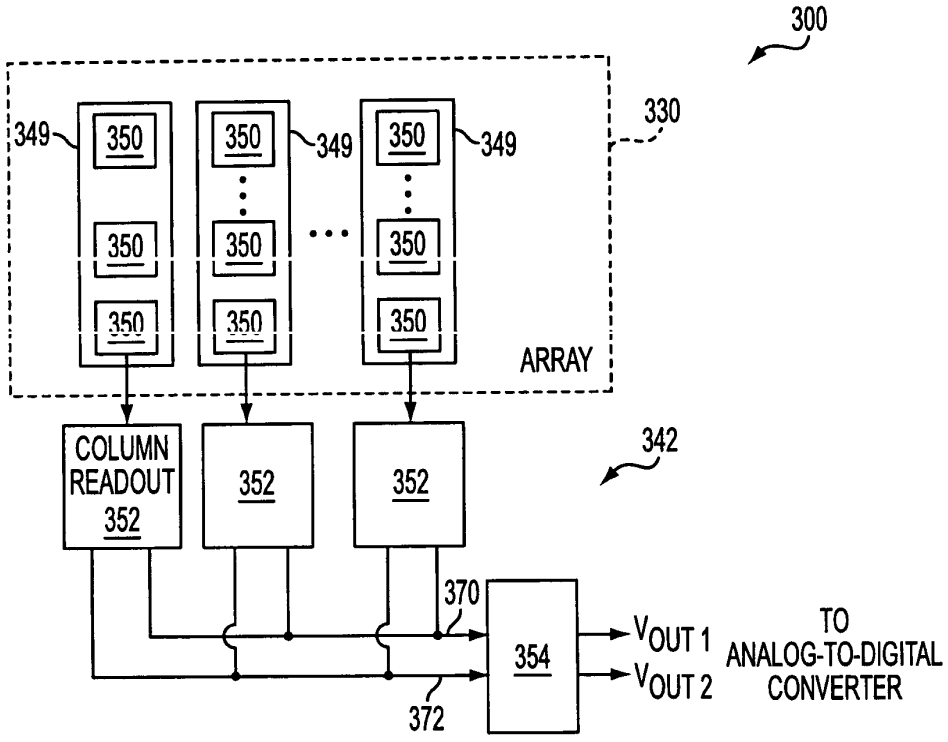
300
330
349
350
ARRAY
342
COLUMN READOUT 352
352
370
372
354
$V_{OUT\,1}$
$V_{OUT\,2}$
TO ANALOG-TO-DIGITAL CONVERTER

FIG. 3

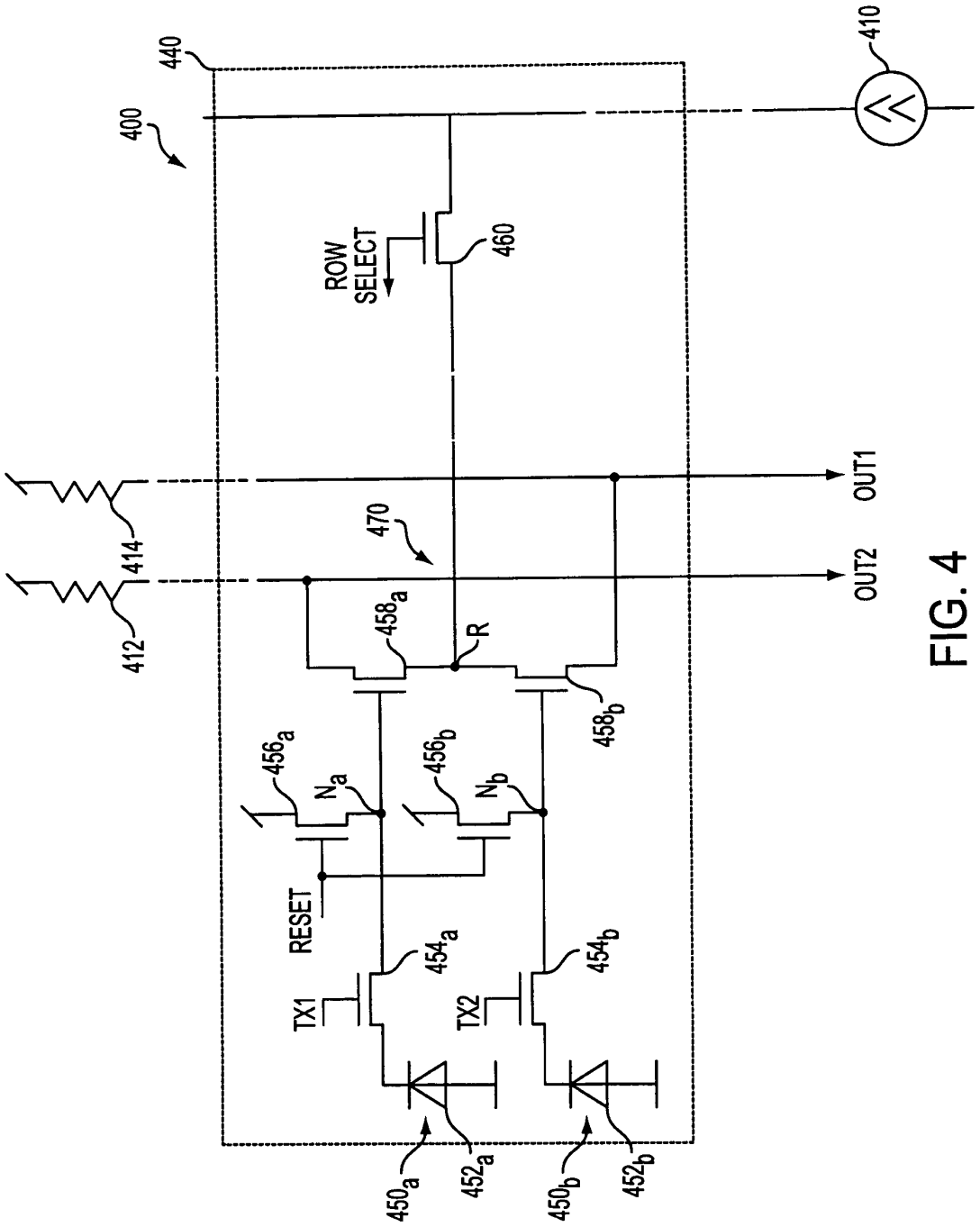
440
400
410
ROW SELECT
460
414
412
470
OUT1
OUT2
458a
R
458b
456a
Na
456b
Nb
RESET
454a
454b
TX1
TX2
450a
452a
450b
452b

FIG. 4

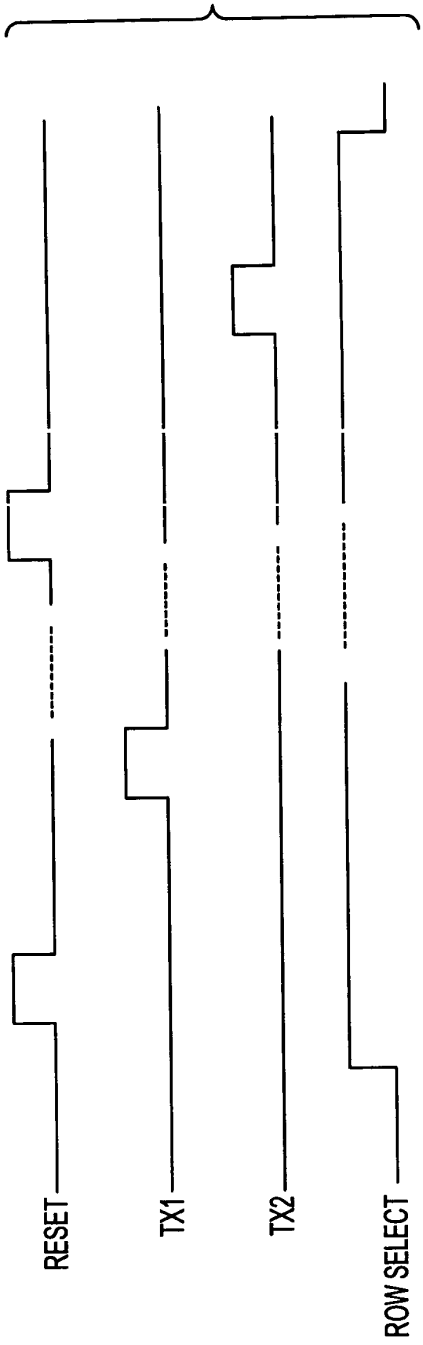

FIG. 5

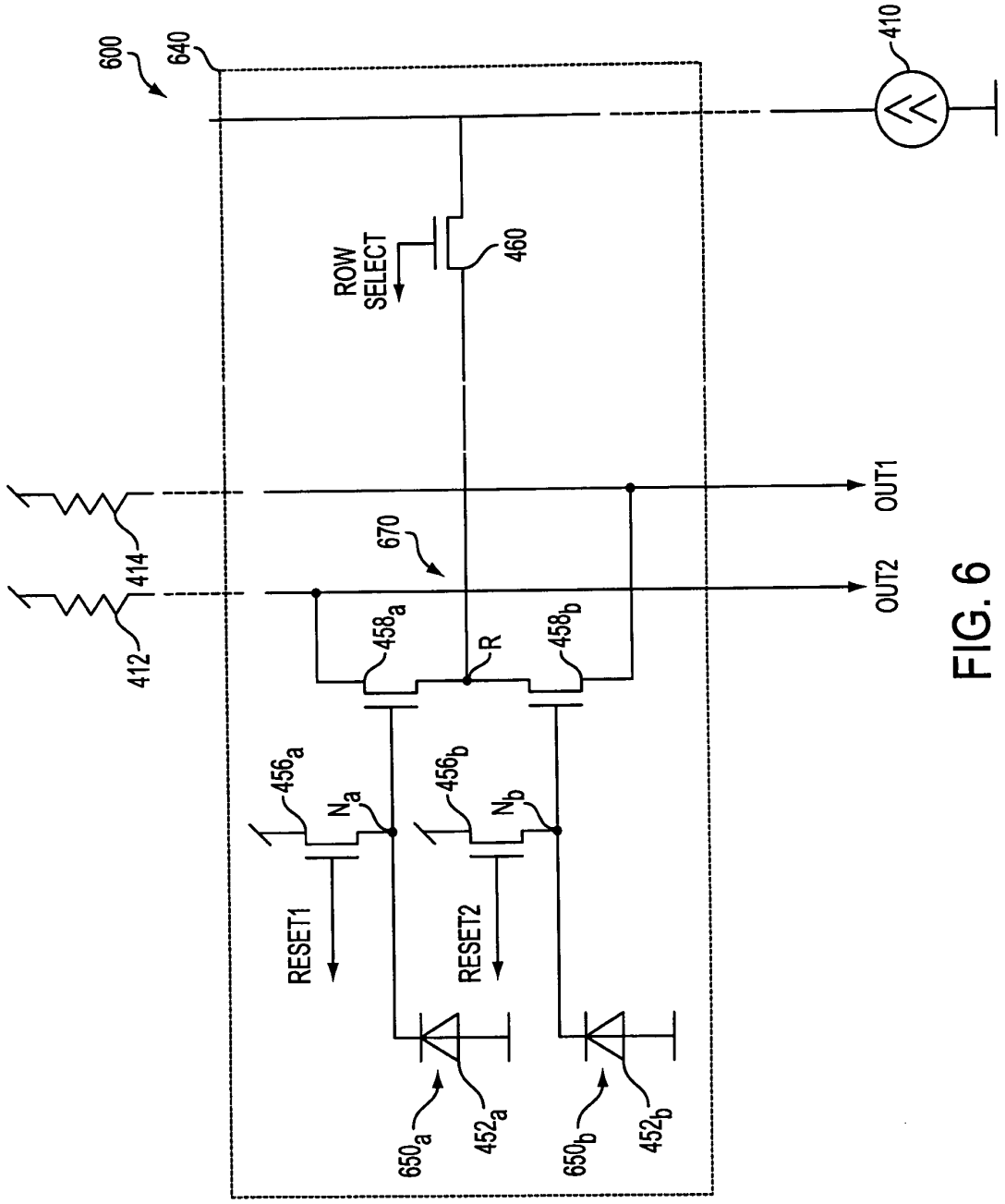
600
640
410
ROW SELECT
460
OUT1
OUT2
670
414
412
458a
R
458b
456a
Na
456b
Nb
RESET1
RESET2
650a
452a
650b
452b

FIG. 6

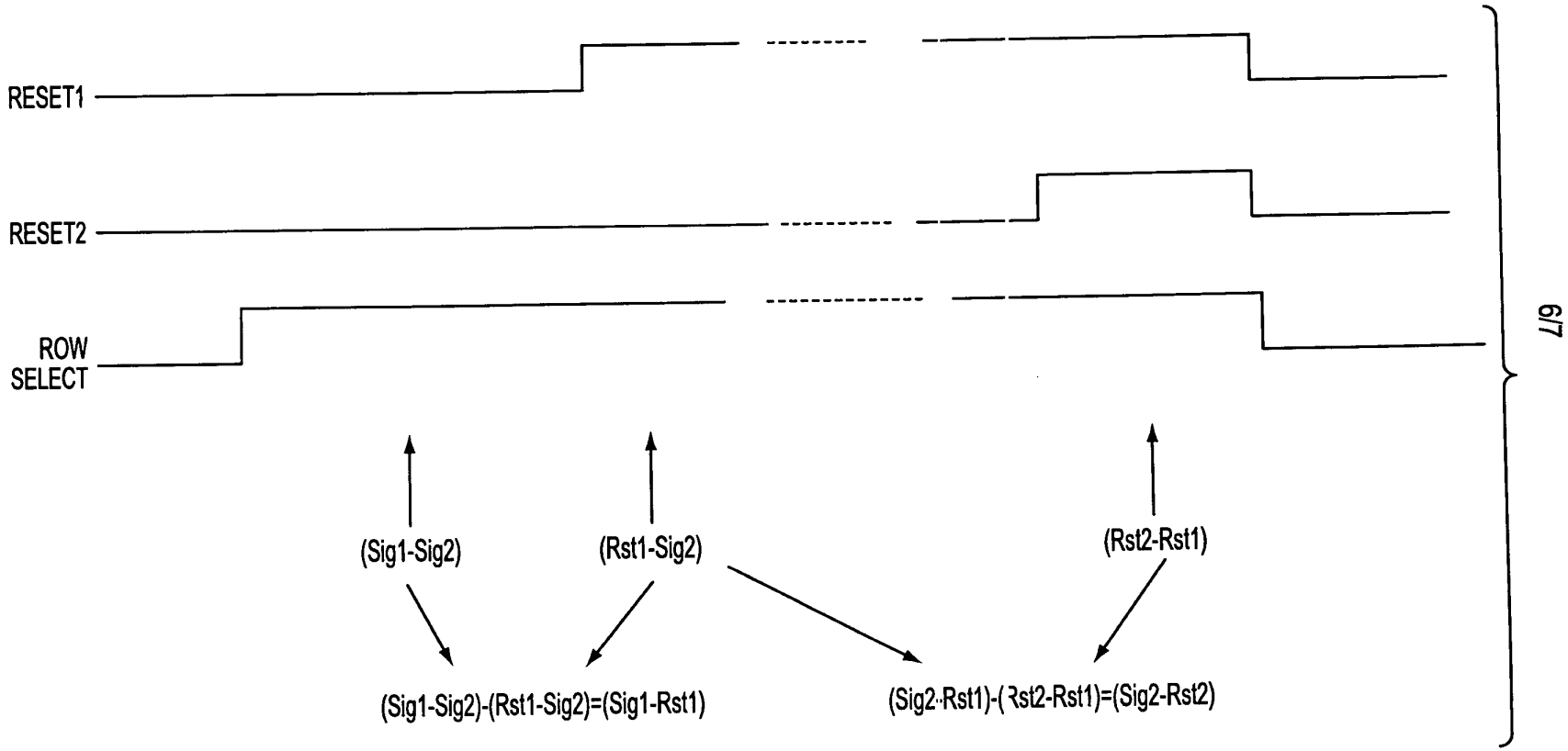
RESET1
RESET2
ROW SELECT
(Sig1-Sig2)
(Rst1-Sig2)
(Rst2-Rst1)
(Sig1-Sig2)-(Rst1-Sig2)=(Sig1-Rst1)
(Sig2-Rst1)-(Rst2-Rst1)=(Sig2-Rst2)
6/7

FIG. 7

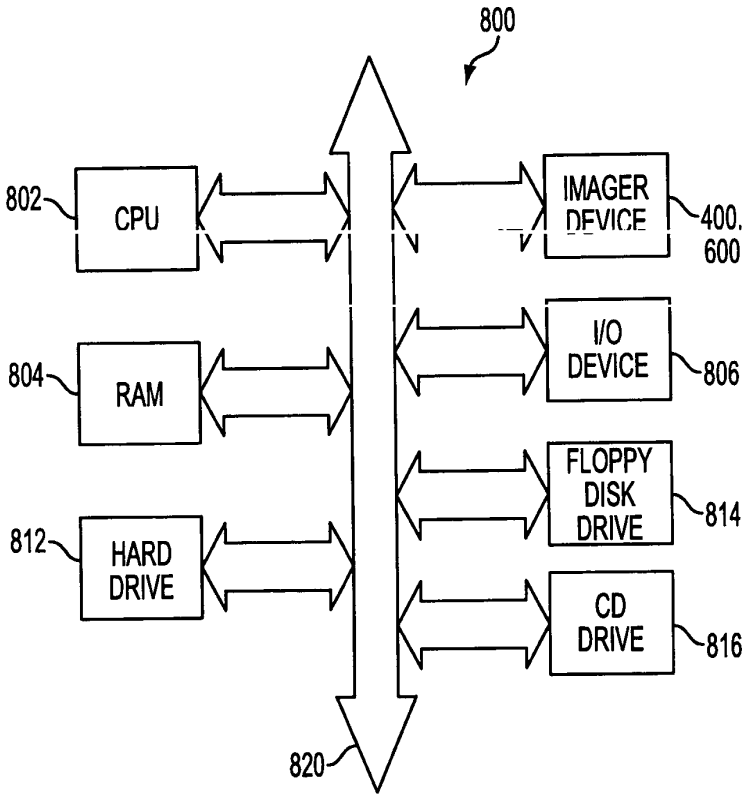
800
802
CPU
804
RAM
812
HARD DRIVE
820
IMAGER DEVICE
400, 600
I/O DEVICE
806
FLOPPY DISK DRIVE
814
CD DRIVE
816

FIG. 8